ABSTRACT OF THE DISCLOSURE

A natural frequency and a calculated mode vector are calculated by using a finite-element method models for analysis which include an object of analysis including a plurality of components and a plurality of elements which are positioned between the components of the object of analysis and indicate a boundary condition between the components, the calculated mode vector having high degree of correlation for an experimental mode vector is extracted and set to a pair, and identifying the boundary condition of the elements based on the extracted calculated mode vector and the natural frequency corresponding to the extracted calculated mode vector.